

MULTIMEDIA



UNIVERSITY

STUDENT ID NO

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# MULTIMEDIA UNIVERSITY

## FINAL EXAMINATION

TRIMESTER 1, 2018 / 2019 SESSION

### DOM5018 – OPERATIONS MANAGEMENT

(For Diploma Students Only)

13 OCTOBER 2018

2.30 p.m – 4.30 p.m

(2 Hours)

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#### INSTRUCTIONS TO STUDENT

1. This question paper consists of **EIGHT (8)** pages with **TWO (2)** sections.
2. Answer **ALL** questions.
3. For section A, shade your answers in the OMR sheet provided.
4. For section B, write your answers in the answer booklet provided.

**SECTION A: [30 Marks]**

1. Which of the following are the essential functions that every organisation performs?
  - a. Production/Operations, Marketing, and Human Resources.
  - b. Marketing, Human Resources, and Finance/Accounting.
  - c. Research and Development, Finance/Accounting, and Purchasing.
  - d. Marketing, Production/Operations, and Finance/Accounting.
  
2. What are the roles of operations managers in an organisation?
  - a. Planning, Directing, Updating, Leading, and Supervising.
  - b. Organising, Planning, Controlling, Staffing, and Managing.
  - c. Planning, Organising, Staffing, Leading, and Controlling.
  - d. Planning, Leading, Organising, Managing, and Controlling.
  
3. Each of these functions in an organisation is affected when the firm yet decided to reduce goods and services **EXCEPT** \_\_\_\_\_.

a. marketing	c. finance
b. admin	d. operations
  
4. Which of the following is **NOT** one of the Ten (10) Strategic Operations Decision?

a. Mass customisation.	c. Maintenance.
b. Layout strategy.	d. Process and capacity design.
  
5. The total of all units produced divided by labour-hours used is \_\_\_\_\_.

a. multifactor productivity	c. labour productivity
b. lean productivity	d. JIT productivity
  
6. Which of the following is **NOT** the main reason to be globalised?

a. Improve the supply chain.	c. Improve operations.
b. Reduce cost.	d. Differentiation.
  
7. Which of the following factors affecting an organisation's mission is **FALSE**?

a. Environment.	c. Job design.
b. Customer.	d. Philosophy and values.

**Continued...**

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16. \_\_\_\_\_ is a cost to prepare a machine or process for manufacturing an order.

- a. Setup cost
- b. Holding cost
- c. Ordering cost
- d. Machinery cost

17. Which of the following is correct about “Work-in-process (WIP)”?

- a. Purchased but not processed.
- b. Undergone some changes but not completed.
- c. Completed product awaiting shipment.
- d. Keep machinery and processes productive

18. Below are the advantages of cycle counting EXCEPT \_\_\_\_\_.

- a. Eliminates shutdowns and interruptions
- b. Eliminates annual inventory adjustment
- c. Maintains semi accurate inventory records
- d. Trained personnel audit inventory accuracy

19. Which of the following industries is most likely to have low equipment utilisation?

- a. Restaurants.
- b. Producing snacks.
- c. Computer manufacturing.
- d. Automotive manufacturing.

20. Which of the following is FALSE regarding repetitive-focused?

- a. They use modules.
- b. They are the classic assembly lines.
- c. They allow easy switching from one product to the other.
- d. They have more structure and less flexibility than process-focused.

21. Which of the following approaches is most likely to have the flexibility of a process to satisfy or fulfill customer's unique desire?

- a. Product Focus.
- b. Process Focus.
- c. Repetitive Focus.
- d. Mass Customisation.

22. The procedure of process focus usually requires \_\_\_\_\_ volume; \_\_\_\_\_ variety of outputs; and \_\_\_\_\_ degree of product flexibility.

- a. high; high; low
- b. low; high; low
- c. low; high; high
- d. high; low; high

Continued...

23. Which of the following reasons are **TRUE** about fast food restaurants that found to be in close proximity to each other?

- a. Due to low cost.
- b. Due to enjoy competition.
- c. Due to availability of skilled labor.
- d. Due to the location clustering near high traffic flows.

Local governments' attitudes toward issues such as private property, intellectual property, zoning, pollution, and employment stability may change over time.

Statement 1

24. Based on the above Statement 1, which of the following term **BEST** described this phenomenon?

- a. Political risk.
- b. Currency risk.
- c. Proximity to markets.
- d. Proximity to suppliers.

25. All of the following are the drivers of globalisation for the location decision **EXCEPT** \_\_\_\_\_.

- a. market economics
- b. higher quality of labor overseas
- c. more rapid and reliable transportation
- d. ease of capital flow between countries

The objective of location strategy is to maximise the benefit of location to the firm.

Statement 2

26. Which of the following location options below are included and aligned with the objective stated in above Statement 2?

- I. Expanding existing facilities
- II. Repair and renovate the current facilities.
- III. Maintain existing and add sites.
- IV. Closing existing and relocating.

- a. I, II and III.
- b. I, II and IV.
- c. I, III and IV.
- d. II, III and IV.

Continued...

27. The objective of maintenance and reliability is to \_\_\_\_\_.

- a. ensure that no breakdowns will ever occur
- b. ensure that the capability of the system is maintained
- c. ensure that breakdowns do not affect the quality of the products
- d. ensure that preventive maintenance costs are kept as low as possible

28. Which of the following is the reliability tactics?

- I. Improving individual components.
  - II. Increasing repair speed.
  - III. Providing redundancy.
  - IV. Increasing system's working order.
- 
- a. I and II.
  - b. I and III.
  - c. II and III.
  - d. II and IV.

29. Autonomous maintenance occurs when employees accept those responsibilities in order to reduce variability. Which of the following responsibilities referring to the "Autonomous Maintenance" practice?

- I. Observe
  - II. Clean
  - III. Notify
  - IV. Predict
- 
- a. I, II and III.
  - b. I, II and IV.
  - c. I, III and IV.
  - d. II, III and IV.

30. Which of the following is **BEST** describes about "Breakdown Maintenance"?

- a. The process that involves repair on an emergency or priority basis.
- b. Used to find stress cracks in tubes, turbine blades and load bearing structures.
- c. Used to detect flaws in ball or roller bearings at high frequency.
- d. The process of routine inspection to keep facilities in good repair.

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**SECTION B: [70 Marks]****QUESTION 1**

*Table 1* shows the monthly sales of KK Bakery Shop in year 2017.

Month	Actual Sales (RM)
January	5500
February	5560
March	6010
April	7000
May	7500
June	8820
July	8000
August	6560
September	6680
October	7220
November	8320
December	8500

*Table 1*

*Note: State your answers in two (2) decimal points*

- a) Compute a 4-month moving average forecast from July until October. (8 marks)
- b) Compute a 4-month moving average forecast for November if the actual sales in October turn out to be RM7120. (2 marks)
- c) Calculate the 3-month weighted moving average forecast in December by assuming weight of 3.0 for the most recent month, 2.5 for the last two months and 2.0 for the last month. (4 marks)
- d) State any ONE (1) potential problem with moving average. (1 mark)

**[Total: 15 Marks]**

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**QUESTION 2**

- a) Once a product is defined, describe how these following documents are used in assisting production personnel in its manufacture?
- (i) Assembly drawing
  - (ii) Assembly chart
  - (iii) Route sheet
  - (iv) Work order
- (8 marks)
- b) Every goods will have to go through the process of life cycle. List the **FOUR (4)** stages of product life cycle. (4 marks)
- c) List **TWO (2)** benefits of "*E – procurement*". (2 marks)
- d) The objective of logistics management is to obtain efficient operations through the integrations of all material acquisition, movement, and storage activities. Explain any **THREE (3)** types of shipping system that a company can adopt to do their moving or delivery activities? (6 marks)

**[Total: 20 Marks]**

**QUESTION 3**

The goal of a human resource strategy is to manage labor and design jobs so people are effectively and efficiently utilized.

- a) What is 'Job design'? (2 marks)
- b) State any **THREE (3)** types of job design. (3 marks)
- c) Explain any **TWO (2)** types of motivation and incentive system given by company to their employees. (4 marks)

The objective of layout strategy is to develop an effective and efficient layout that will meet the firm's competitive requirements.

- d) Provide any **TWO (2)** advantages of work cells. (2 marks)
- e) State any **FOUR (4)** types of layout. (4 marks)

**[Total: 15 Marks]**

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**QUESTION 4**

F&N Malaysia produces a limited edition of grape drinks for festival that are transported to their distributors. Johnny has been asked by his manager to reduce inventory by introducing a Kanban system. The following data has provided in Table 2:

Daily demand	5000 bottles
Lead time	4 days
Safety stock	1 day
Kanban size	1000 bottles

*Table 2*

- a) Calculate demand during lead time. (2 marks)
- b) Calculate the safety stock. (2 marks)
- c) How many Kanbans are needed? (2 marks)
- d) Define Toyota Production System (TPS). (2 marks)
- e) Provide any **TWO (2)** Toyota Production System (TPS) elements. (2 marks)
- f) 5S is a workplace organisation improvement method that uses a list of five Japanese words. List and explain each of it. (10 marks)

[Total: 20 Marks]

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